

DT 25-MAR-2003. (revised)  
 DT 25-SEP-1995 (first entry)  
 XX Human recombinant aFGF.  
 DE  
 XX Acidic fibroblast growth factor; aFGF; vulnary; angiogenesis; mitogen.  
 KW  
 OS Homo sapiens.  
 XX  
 PN US5401832-A.  
 XX  
 PD 28-MAR-1995.  
 XX  
 XX 25-SEP-1992; 92US-00951365.  
 XX  
 XX 24-DEC-1984; 84US-00685923.  
 PR  
 PR 12-SEP-1985; 85US-00774359.  
 PR  
 PR 30-MAY-1986; 86US-00868473.  
 PR  
 PR 11-JUL-1986; 86US-00884460.  
 PR  
 PR 04-JUN-1987; 87US-00054991.  
 PR  
 PR 04-MAY-1988; 88US-00190293.  
 PR  
 PR 08-FEB-1991; 91US-00654397.  
 PR  
 PR 25-SEP-1991; 91US-00765472.  
 XX  
 PA (MERI) MERCK & CO INC.  
 XX  
 XX Linemeyer DL, Thomas KA, Kelly LJ, Gimenez-Gallego G;  
 PI  
 XX WPI; 1995-138983/18.  
 DR  
 XX New recombinant human acidic fibroblast growth factor - used to promote  
 PT cell growth, to promote wound healing, for vascular grafts and blood  
 PT vessel repair.  
 XX  
 XX Claim 2; Col 30; 25pp; English.  
 PS  
 XX Oligonucleotides were synthesized on the basis of the amino acid sequence  
 CC of bovine acidic fibroblast growth factor (aFGF) and used to produce a  
 CC synthetic gene (given in AA08233) incorporating codons preferred by E.  
 CC coli or mammalian cells, unique cloning sites, etc. This synthetic gene  
 CC was mutagenized to obtain a gene encoding a human recombinant aFGF  
 CC (AA074647) having activity equivalent to the native protein. (Updated on  
 CC 25-MAR-2003 to correct PF field.)  
 XX  
 XX Sequence 140 AA;  
 SQ

Query Match 99.3%; Score 757; DB 2; Length 140;  
 Best Local Similarity 100.0%; Pred. No. 6.1e-78;  
 Matches 140; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2 FNLPGNYKKPKLLYCSNGGHFLRLIPDGTVDGTRDRSDQHILQLLSAESVGEVYIKSTE 61  
 DB 1 FNLPGNYKKPKLLYCSNGGHFLRLIPDGTVDGTRDRSDQHILQLLSAESVGEVYIKSTE 60  
 QY 62 TGOYLANDTDGLLYGSGTPEECFLERLEENHYNTYISKGAENKMPVGLKKGSCRG 121  
 DB 61 TGOYLANDTDGLLYGSGTPEECFLERLEENHYNTYISKGAENKMPVGLKKGSCRG 120  
 QY 122 PRTHYGKAILFLPLPVSSD 141  
 DB 121 PRTHYGKAILFLPLPVSSD 140  
 QY 122 PRTHYGKAILFLPLPVSSD 141  
 DB 121 PRTHYGKAILFLPLPVSSD 140  
 RESULT 11  
 ID AA04806 standard; protein; 140 AA.  
 XX  
 AC AA04806;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 29-DEC-1996 (first entry)  
 XX Human acidic fibroblast growth factor.  
 DE

XX Endothelial cell growth factor; ECGF; blood vessel; regeneration;  
 KW heparin-Sepharose affinity chromatography; probe; oligonucleotide; FGF;  
 KW fibroblast growth factor; ss.  
 XX  
 OS Homo sapiens.  
 XX  
 PN US5552528-A.  
 XX  
 PD 03-SEP-1996.  
 XX  
 XX 03-NOV-1994; 94US-00334884.  
 XX  
 XX 03-MAR-1986; 86US-00835594.  
 PR  
 PR 18-DEC-1987; 87US-00134499.  
 PR  
 PR 29-APR-1991; 91US-00593079.  
 PR  
 PR 27-NOV-1991; 91US-00799859.  
 XX  
 PA (RHON) RHONE POULENC RORER PHARM INC.  
 XX  
 XX Maciag T, Burgess W;  
 PI  
 XX WPI; 1996-412132/41.  
 DR  
 DR N-PSDB; AAT37503.  
 XX  
 XX Isolated, purified, biologically active bovine beta endothelial cell  
 PT growth factor - useful to regenerate or treat damaged blood vessels.  
 PT  
 XX Disclosure; Fig 8; 28pp; English.  
 PS  
 XX Bovine beta-endothelial cell growth factor (beta-ECGF; AAW03999) having a  
 CC mol.wt. of 20 kD can be purified at least 16300 fold from bovine brain  
 CC using heparin-Sepharose affinity chromatography. ECGF is useful for,  
 CC among other purposes, diagnostic applications and has potential in the  
 CC treatment of damaged blood vessels or other endothelial cell-lined  
 CC structures. Human ECGF (AAT37503) or fragments may be obtained using  
 CC oligonucleotides (AAT37504 and AAT37508 to AAT37509) whose design is  
 CC based on the sequence of bovine alpha- and beta-ECGF. (Updated on 25-MAR-  
 CC 2003 to correct PF field.)  
 XX  
 XX Sequence 140 AA;  
 SQ

Query Match 99.3%; Score 757; DB 2; Length 140;  
 Best Local Similarity 100.0%; Pred. No. 6.1e-78;  
 Matches 140; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 2 FNLPGNYKKPKLLYCSNGGHFLRLIPDGTVDGTRDRSDQHILQLLSAESVGEVYIKSTE 61  
 DB 1 FNLPGNYKKPKLLYCSNGGHFLRLIPDGTVDGTRDRSDQHILQLLSAESVGEVYIKSTE 60  
 QY 62 TGOYLANDTDGLLYGSGTPEECFLERLEENHYNTYISKGAENKMPVGLKKGSCRG 121  
 DB 61 TGOYLANDTDGLLYGSGTPEECFLERLEENHYNTYISKGAENKMPVGLKKGSCRG 120  
 QY 122 PRTHYGKAILFLPLPVSSD 141  
 DB 121 PRTHYGKAILFLPLPVSSD 140  
 QY 122 PRTHYGKAILFLPLPVSSD 141  
 DB 121 PRTHYGKAILFLPLPVSSD 140  
 RESULT 12  
 ID AA04805 standard; protein; 154 AA.  
 XX  
 AC AA04805;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 29-DEC-1996 (first entry)  
 XX Human beta-endothelial cell growth factor.  
 DE  
 XX Endothelial cell growth factor; ECGF; blood vessel; regeneration;  
 KW heparin-Sepharose affinity chromatography; probe; oligonucleotide; FGF;  
 KW fibroblast growth factor.

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Db      241  CAGACACATTCAGCTGCAACTCTGGCGGAAGCGTTGGAGGCTCTATATCAAGTCGAC 300
QY      301  CGAGACTGGCCGATACCTTGGCCATGGAACCGATGGGCTTGTATGGCTCAGACGCC 360
Db      301  CGAGACTGGCCGATACCTTGGCCATGGAACCGATGGGCTTGTATGGCTCAGACGCC 360
QY      361  TAAAGAAAGATGCTTGTCTAGAAAGATGAGAAAGAAACCAATTACACAGCTACATATC 420
Db      361  TAAAGAAAGATGCTTGTCTAGAAAGATGAGAAAGAAACCAATTACACAGCTACATATC 420
QY      421  GAAAAAACAATGCAAGAGAACTGGTTGTAGGCTTAAAAAATGGTTCTGTAAAGC 480
Db      421  GAAAAAACAATGCAAGAGAACTGGTTGTAGGCTTAAAAAATGGTTCTGTAAAGC 480
QY      481  TGGACCAAGGACTCACTATGSCCAAAAGGCTATCTTGTCTGCCACTACCAAGTGAAGTC 540
Db      481  TGGACCAAGGACTCACTATGSCCAAAAGGCTATCTTGTCTGCCACTACCAAGTGAAGTC 540
QY      541  CGACTAAGGATCCGAATTCGAGCTCCGTCGACAGCTTGGCGCGCACTCGAGCACACC 600
Db      541  CGACTAAGGATCCGAATTCGAGCTCCGTCGACAGCTTGGCGCGCACTCGAGCACACC 600
QY      601  ACCACCACTGAGATCCGCTGCTAAACA 630
Db      601  ACCACCACTGAGATCCGCTGCTAAACA 630

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RESULT 2

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US-09-929-918-6
; Sequence 6, Application US/09929918
; Patent No. 6773899
; GENERAL INFORMATION:
; APPLICANT: Kordyum, Vitaliy A.
; APPLICANT: Chernykh, Svitlana I.
; APPLICANT: Slavchenko, Iryna Yu.
; APPLICANT: Vozianov, Oleksandr
; TITLE OF INVENTION: PHAGE-DEPENDENT SUPER PRODUCTION OF
; FILE REFERENCE: PHAGE 006A
; CURRENT APPLICATION NUMBER: US/09/929,918
; CURRENT FILING DATE: 2001-08-15
; PRIOR FILING DATE: 1999-05-25
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 630
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: This sequence is a chemically synthesized sequence
; OTHER INFORMATION: encoding a 140 amino acid form of fibroblast
; OTHER INFORMATION: growth factor with alterations for preferred codon
; NAME/KEY: CDS
; LOCATION: (122)...(544)
US-09-929-918-6

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Query Match      100.0%; Score 630; DB 4; Length 630;
Best Local Similarity 100.0%; Pred. No. 1e-183;
Matches 630; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1  CGGTAGAGATCGAGATCTCGATCCCGGAAATTAATACGACTCACTATAGGGGAATTGT 60
Db      1  CGGTAGAGATCGAGATCTCGATCCCGGAAATTAATACGACTCACTATAGGGGAATTGT 60
QY      61  GAGCGGATAAACAATCCCTCTAGAAATATTTGTTTAACTTTAAGAGGAGATATACA 120
Db      61  GAGCGGATAAACAATCCCTCTAGAAATATTTGTTTAACTTTAAGAGGAGATATACA 120
QY      121  TATGTTTAACTTCGCGCGGGAATTACAAAACCCCAAGCTTCTTACTCAGTAAGC 180

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Db      121  TATGTTTAACTTCGCGCGGGAATTACAAAACCCCAAGCTTCTTACTCAGTAAGC 180
QY      181  AGGACACTTCTCGGAATTCGCGAGATGGCACAGTAGATGGGACTCGCGATCGCTCGA 240
Db      181  AGGACACTTCTCGGAATTCGCGAGATGGCACAGTAGATGGGACTCGCGATCGCTCGA 240
QY      241  CCAGCACATTCAAGCTGCAACTCTCGGCGGAAAGCGTTGGAGAGGCTCTATATCAAGTCGAC 300
Db      241  CCAGCACATTCAAGCTGCAACTCTCGGCGGAAAGCGTTGGAGAGGCTCTATATCAAGTCGAC 300
QY      301  CGAGACTGGCCGATACCTTGGCCATGGAACCGATGGGCTTGTATGGCTCAGACGCC 360
Db      301  CGAGACTGGCCGATACCTTGGCCATGGAACCGATGGGCTTGTATGGCTCAGACGCC 360
QY      361  TAAAGAAAGATGCTTGTCTAGAAAGATGAGAAAGAAACCAATTACACAGCTACATATC 420
Db      361  TAAAGAAAGATGCTTGTCTAGAAAGATGAGAAAGAAACCAATTACACAGCTACATATC 420
QY      421  GAAAAAACAATGCAAGAGAACTGGTTGTAGGCTTAAAAAATGGTTCTGTAAAGC 480
Db      421  GAAAAAACAATGCAAGAGAACTGGTTGTAGGCTTAAAAAATGGTTCTGTAAAGC 480
QY      481  TGGACCAAGGACTCACTATGSCCAAAAGGCTATCTTGTCTGCCACTACCAAGTGAAGTC 540
Db      481  TGGACCAAGGACTCACTATGSCCAAAAGGCTATCTTGTCTGCCACTACCAAGTGAAGTC 540
QY      541  CGACTAAGGATCCGAATTCGAGCTCCGTCGACAGCTTGGCGCGCACTCGAGCACACC 600
Db      541  CGACTAAGGATCCGAATTCGAGCTCCGTCGACAGCTTGGCGCGCACTCGAGCACACC 600
QY      601  ACCACCACTGAGATCCGCTGCTAAACA 630
Db      601  ACCACCACTGAGATCCGCTGCTAAACA 630

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RESULT 3

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US-09-929-945-4
; Sequence 4, Application US/09929945
; Patent No. 6642026
; GENERAL INFORMATION:
; APPLICANT: Slegmann, Thomas
; APPLICANT: Kordyum, Vitaliy A.
; APPLICANT: Chernykh, Svitlana I.
; APPLICANT: Slavchenko, Iryna Yu.
; APPLICANT: Vozianov, Oleksandr
; TITLE OF INVENTION: SUPER PRODUCTION OF RECOMBINANT
; FILE REFERENCE: CVGENG.008A
; CURRENT APPLICATION NUMBER: US/09/929,945
; CURRENT FILING DATE: 2001-08-15
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 630
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Chemically synthesized sequence for human acidic
; OTHER INFORMATION: Fibroblast Growth Factor (134 amino acids) using
; NAME/KEY: CDS
; LOCATION: (122)...(526)
US-09-929-945-4

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Query Match      92.7%; Score 584; DB 4; Length 630;
Best Local Similarity 97.1%; Pred. No. 1.5e-169;
Matches 612; Conservative 0; Mismatches 0; Indels 18; Gaps 1;

QY      1  CGGTAGAGATCGAGATCTCGATCCCGGAAATTAATACGACTCACTATAGGGGAATTGT 60
Db      1  CGGTAGAGATCGAGATCTCGATCCCGGAAATTAATACGACTCACTATAGGGGAATTGT 60
QY      61  GAGCGGATAAACAATCCCTCTAGAAATATTTGTTTAACTTTAAGAGGAGATATACA 120

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